Department Response Document

1. Comment: What is EVSE?

Department Response: EVSE is an acronym that stands for <u>E</u>lectric <u>V</u>ehicle <u>S</u>upply <u>E</u>quipment.

2. Comment: In the phase two of the RFP process, will that come out in later meetings about how this proposal should be submitted to DNREC?

Department Response: Yes, the Department will hold workshop(s) prior to Phase 2 to discuss the RFP process and how to properly apply.

3. Comment: Phase 1 focuses on school buses. Can the Department provide some insight on how the decision for school buses was made? And a follow-up question would be, are you restricting the funding to purely school buses, or can educational institutions like universities also be part of the funding?

Department Response: The Department received comments from the Department of Education, in regard to the Volkswagen Meeting held on March 22, 2017. The Department of Education recommended that the Department spend all VW mitigation funding on school buses over a course of 10 years. The Department of Education letter was the only letter of the 13 comment letters received to recommend how the mitigation settlement funds should be spent.

The Department has recommended a 3-phase program with school bus replacements occur in Phase 1. The Department has recommended the Department of Education consider replacements for school districts and charter schools that serve disparately populated (greater than 40%) schools or those school districts and charter schools serving in areas of poor air quality. Educational institutions, like universities, may apply to receive VW funding under Phase 2 of the VW Mitigation Program.

4. Comment: Sierra Club agrees that school buses are a great use of the funds, particularly because they provide those additional air quality benefits for traveling vehicles that are emitting pollution around children, and they are around neighborhoods where residents are breathing in air could have significant health benefits and especially for children, as their lungs are developing, we know that they are particularly vulnerable to air pollution. So we very much support the idea of investing in school buses.

On number two, the percent question, it would be our suggestion that the Division should invest the marginal difference between the cost of a conventional diesel school bus and an electric bus. It's not at all appropriate for this Volkswagen emissions reduction money to be invested in further fossil fuels infrastructure, which would lock us into future air

pollution. Even though it's lesser pollution than traditional diesel vehicles, it's still a lot more air pollution than zero tailpipe emissions of an electric vehicle.

Department Response: The Department appreciates the Sierra Club's support for clean transportation options that affect our most vulnerable population – Delaware's children. The Department has recommended that Phase 1 replace dirty diesel buses with propane fuel. Research shows NOx emissions will be reduced by 11 percent just by replacing a diesel school bus with a new propane school bus¹. Delaware can achieve more emission reductions at broader cost benefit by replacing 150 older dirty diesel school buses with propane than it could by purchasing 22 buses with an electric equivalent. Estimates show a new electric school bus would cost \$230,000 whereas a propane equivalent is \$85,000. The cost differential is \$145,000 per bus. The Department could only replace 22 buses in Phase 1.

5. Comment: I had a couple of clarifying questions on the 15 percent for charging infrastructure. The first was the RFP. Do you know if there are criteria already laid out for that infrastructure? Is that something that's going to be laid out in subsequent meetings? On the applicability side, or the eligibility side, between government and private entities, there is a big difference in the potential costs and match, as stipulated in the consent decree. Do you have a vision for whether it's going to be mostly private sector or private entity focused or public entity focused, or is that another detail that's forthcoming?

Department Response: The details for Phase 3 have not been developed but the Department expects the design of the program and the RFP for EVSE infrastructure to be similar to the criteria used in the past. The Department expects significant improvements in infrastructure and technology in the next few years. The Department will accommodate as many new technologies as possible. The Department will hold public meetings in the future to discuss Phase 3.

6. Comment: So by way of just general comments from ChargePoint's perspective, most states that we are looking at (and we are tracking in all 50 state), what other beneficiary agencies are doing with the 15 percent. Generally speaking, a mix of Level 2 NDC fast or Level 10, as it might be, but higher-speed charging, but also charging to meet the needs of daily drivers, 95 percent of charging being placed at Level 2. We think that that's a really good use for these funds, because it's going to address the most driving situations. And then certainly having smart as a baseline criteria seems to make a lot of sense for a lot of states, because smart charging comes with data and the cloud capabilities so that the states can actually get a lot of the data for their own transportation planning purposes, but also allow site hosts to get better-managed charging and better use and utilization from the charging assets that they have on their sites. So those two things, I think, are

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¹ Propane Education and Research Council - https://www.propanecouncil.org/

really critical. The smart charging and making sure that there is a mix of Level 2 and DC fast or high-speed charging.

Department Response: The Department appreciates Chargepoint's support for investing the 15% in EVSE in Phase 3. The Department has recommended that EVSE be included in Phase 3. The Department will consider as many new technologies as possible. The Department will hold public meetings in the future to discuss Phase 3.

7. Comment: Under school replacements, the slide states school district and charter bus schools. Would any contractors be included in that? They do own half the buses in this state.

Department Response: Yes, the Department understands that School Districts contract their transportation needs and that only one school district is state owned. Contract owned buses would be eligible if the routes they operate serve a disparately-populated (greater than 40%) school or those school districts and charter schools serve in areas of poor air quality. The cost share and Capital Budget of the Department of Education will limit how many school buses can be replaced with the Department of Education. The remaining replacements will be with the private bus owners.

8. Comment: The State of Maryland Department of Energy has taken some Volkswagen money, or they are going to get Volkswagen money. They pay half the difference of propane so it's paid out in a rebate. It's open to anybody that, you know, if you bought a pickup and you own a business, they will pay half the difference for you to upgrade to propane. I didn't know if they had considered a program like that in Delaware where you would submit an application. They guarantee it and, you know, it works pretty good.

Department Response: The Department recommendation of 25% provides more value to the transportation provider than the State of Maryland's VW program. A new propane bus costs approximately \$85,000 and a new diesel costs about \$75,000. The cost differential is \$10,000. If the State of Maryland offers a 50% rebate on the cost differential, the rebate would be \$5,000 (10,000*.50 - \$5,000). The Department has recommended a cost share of 25% of the base price which provides \$21,250 for each school bus replacement (\$85,000*.25).

9. Comment: The other thing, I know we have had some past programs with you guys and the biggest hiccup in those programs is buses need to start school on September 1st and you hold buses up because you are waiting on somebody to sign a check or approve some money or -- them buses have to start school September 1st. So the buses, you know, if you are putting a new bus on and it's approved, it needs to start school when school starts. So they need to streamline this program so that, if they are going to replace buses, it has to start when school starts.

Department Response: The Department appreciates the comment. The Department is working with the Department of Education and its capital spending timeline for Phase 1. We are taking into account the school calendar and intend Phase 1 to deploy the new propane fueled bus fleet in time for the 2019-2020 school year.

10. Comment: It was mentioned in Phase 1 and Phase 2 that, if the money is not spent, it can potentially roll over to Phase 3. What happens in Phase 3 if the money has not been spent? Can it retroactive to school buses in Phase 1?

Department Response: If the VW funds are not spent by the end of Phase 3, the Department will consider developing Phase 4. The Department has until 2027 to spend the funds. If the funds are not spent by 2027, they must be returned to Wilmington Trust and will be divided among the beneficiary states who did not return funds. The Department anticipates all funds to be spent or encumbered by 2024.

11. Comment: Is there anything down the line potentially for school bus fueling infrastructure?

Department Response: VW Mitigation funds cannot be spent on propane infrastructure. The funds for Phases 1 through 3 must be spent on eligible mitigation actions listed in the Environmental Mitigation Settlement (Appendix D-2)² and Delaware's Environmental Mitigation Plan³. The action items include: Class 8 Local Freight Trucks and Port Drayage Trucks (Eligible Large Trucks), Class 4-8 School Bus, Shuttle Bus, or Transit Bus (Eligible Buses), Freight Switchers, Ferries/Tugs, Ocean Going Vessels (OGV) Shore power, Class 4-7 Local Freight Trucks (Medium Trucks), Airport Ground Support Equipment, and Forklifts and Port Cargo Handling Equipment.

12. Comment: For clarification in the cost sharing, is the government still 100 percent, or is it the same as private organizations now?

Department Response: All entities, whether private or government, will receive the same cost shares. The Department has proposed in the work plan that the cost shares provided for each project category be equivalent to the cost shares stipulated by Diesel Emission Reduction Act (DERA) program administered by USEPA⁴.

13. Comment: The one thing I just wanted to suggest, maybe, if it's doable, for the larger-engine projects like we do on some of the boats, the cost really get quite large when you start using -- having to do the support systems in going to shipyards and things like that. A 50/50 match that was done years ago actually worked very well. And that would really help offset some of the costs. Because I compared it just to a simple rebuild for the engine. So I would like to suggest that that's doable. I don't know whether you can

² https://www.epa.gov/sites/production/files/2017-10/documents/statebeneficiaries.pdf

³ http://www.dnrec.delaware.gov/air/Pages/VWMitigationPlan.aspx

⁴ https://www.epa.gov/sites/production/files/2017-02/documents/fy17-state-program-guide-2017-02.pdf

match that to the size of the cost of the projects, along those lines. That would be helpful.

Department Response: All entities, whether private or government, will receive the same cost shares depending on the eligible mitigation action. The Department has recommended that the cost share for each project mirror the cost share percentages stipulated in USEPA's Diesel Emission Reduction Act program and cost share for the Tug and Ferries category is as follows:

Eligible Mitigation Action	Activity	Vehicle and Equipment Eligibility (Engine Model Year or Tier)	Proposed VW Funding	Applicant Cost Share
Ferries/Tugs	Engine replacement with new Tier 3 or 4 diesel or alternate fueled engine	Pre-Tier 3	40%	60%
	Engine replacement with new all- electric engine	Pre-Tier 3	60%	40%
	Certified Remanufacture System or Verified Engine Upgrade	Pre-Tier 3	40%	60%

14. Comment: Can Phase 2 and the applications and everything be started in 2018 so there won't be a delay as far as keeping things moving for projects?

Department Response: The Department has proposed that Phase 2 commence in the 1st quarter of 2019 with a release of an RFP. The Department intends to develop an RFP in late 2018. The Department intends to hold a workshop on the RFP and how to apply in advance of the RFP release in early 2019.

15. Comment: I just want to talk quickly about Phase 1. And you're talking about diesel, cleaning up diesel. Is diesel completely excluded? Because today it's called clean diesel, so it is very clean. It has got less carbon monoxide output than gasoline or propane. And then, two, for Phase 2, is there such things as transit buses like repowering the bus or putting another EPA version engine in place of what's currently there? So, for example, taking out an '07 EPA and putting in a 2010 EPA engine? Is that considered? And then for phase three, Cummins is also coming out with an electric power train. So we will have, by the time Phase 3 gets here, we will have an electric power train where it's 100 percent electric. And then, also, we could use that as a repower, take out a diesel power train and put in an electric power train so that's also an option. Is that something that they could consider?

Department Response: The Department has proposed replacing older dirty diesel school buses with cleaner propane buses in Phase 1. The VW Mitigation Settlement allows replacement of older

model year (2009 – 1992) with new model year (2010 and newer) diesel school buses. In Phase 2, transit buses can be repowered with cleaner diesel technology. Applicants considering this technology should apply under the competitive request for proposal process. Electric power train replacements are also an eligible mitigation action. Phase 3, has not been developed. The Department will develop and propose Phase 3 following the selection and award of projects received during Phase 2.

16. Comment: I think refitting existing buses makes a lot of sense from a cost perspective and also from an environmental perspective if that is allowed.

Department Response: Engine replacements and retrofits as well as equipment replacements are eligible actions under Appendix D-2 of the Mitigation Plan. They will be an eligible mitigation action under Phase 2.